Aquatic Ecosystem Services and Management in East Africa: The Tanzania Case

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Abstract

Diverse aquatic ecosystems in Tanzania provide economically important ecosystem services. The rich supply of these services is under threat. Projections show critical water scarcity in the country by the year 2050. Demography, excessive withdrawals, land use changes, exotic species invasions and climate change that result in loss of perennial flows, eutrophication, sedimentation, and algal blooms are among the major drivers of aquatic ecosystem changes in Tanzania. Water resources uses and their management in Tanzania are mainly determined by the national macroeconomics and policies. In this review, Great Ruaha River (GRR) and Lake Victoria Basin (LVB) are used as case examples for demonstrating status, trends and drivers of ecosystem changes, and their management options in Tanzania through government and donor efforts. As a way forward, in the new Tanzania National Water Policy (NAWAPO) of 2002, Integrated Water Resource Management (IWRM) approaches as tools to ensure ecosystem protection and stakeholder's participation have been adopted. Water for environment is given a second priority in water allocation after basic human needs. The Integrated Water Resources management and Development (IWRMD) plans currently being developed will form legal basis in management of water in an environmentally and ecosystem responsible manner. Through the IWRMD approved plans, drastic actions can be legally taken to protect and/or restore important ecosystem services in hotspot areas like the GRR.

Keywords
Ecosystem services Water resources IWRM Lake Victoria Rufiji basin